What is claimed is:

1. A polypeptide having Calcineurin-binding activity selected from the group consisting of:

(a) polypeptides comprising the amino acid sequence set forth in SEQ ID NO: 1 or SEQ ID NO: 2;

(b) polypeptides corresponding to the polypeptides of (a) contained in NF-Atx family proteins;

(c) polypeptides of (a) or (b) in which one or more amino acids are added, deleted, substituted, and/or inserted; and

(d) fusion polypeptides comprising a polypeptide of (a), (b) or (c) and one or more other polypeptides.

2. A DNA encoding the polypeptide of claim 1.

3. A vector comprising the DNA of claim 2.

4. A transformant carrying the DNA of claim 2 or the vector of claim 3.

5. A method for producing the polypeptide of claim 1, the method comprising culturing the transformant of claim 4, and recovering the expressed polypeptide from the transformant or the culture supernatant.

6. A method for screening a compound that inhibits the interaction between Calcineurin and NF-AT, the method comprising:

(a) contacting the polypeptide of claim 1 with Calcineurin in the presence or absence of a sample;

(b) detecting the binding activity of the polypeptide to Calcineurin; and

(c) selecting a compound that reduces the binding activity compared with the binding activity detected in the absence of the sample.

7. A compound isolable by the screening method of claim 6.

8. A pharmaceutical composition comprising the compound of claim 7 as an active ingredient.

9. A pharmaceutical composition comprising the polypeptide of claim 1 as an active ingredient.

10. A method of suppressing immune, the method comprising administering the pharmaceutical composition of claim 8 to a patient in need of immunosuppression.

11. A method of suppressing immune, the method comprising administering the pharmaceutical composition of claim 9 to a patient in need of immunosuppression.

12. A method of preventing the hypertrophy of cardiac smooth muscle or vascular smooth muscle, the method comprising administering the pharmaceutical composition of claim 8 to a patient.

13. A method of preventing the hypertrophy of cardiac smooth muscle or vascular smooth muscle, the method comprising administering the pharmaceutical composition of claim 9 to a patient.

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